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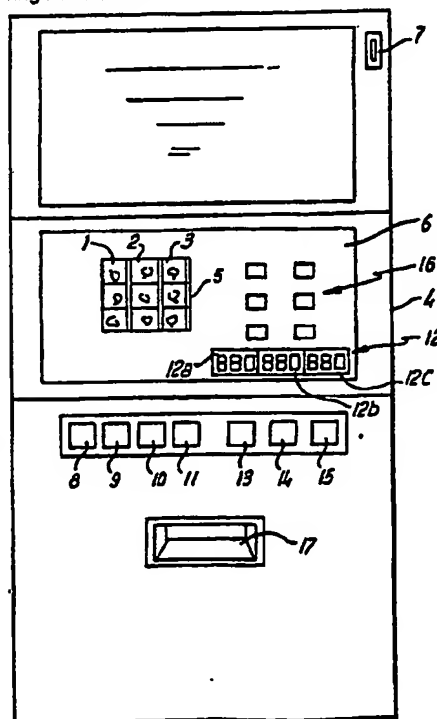
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**(54) Entertainment machines**

(57) A coin operated entertainment machine, particularly a fruit machine, can be operated by a player to select a combination of symbols. The machine has an award accumulator (12c), such as a digital display, which shows accumulated awards corresponding to winning symbol combinations obtained by the player in different games. The machine also has a gamble device (15) and the player is given the opportunity of gambling at least part of the accumulated total with the possibility of increasing or decreasing its value.

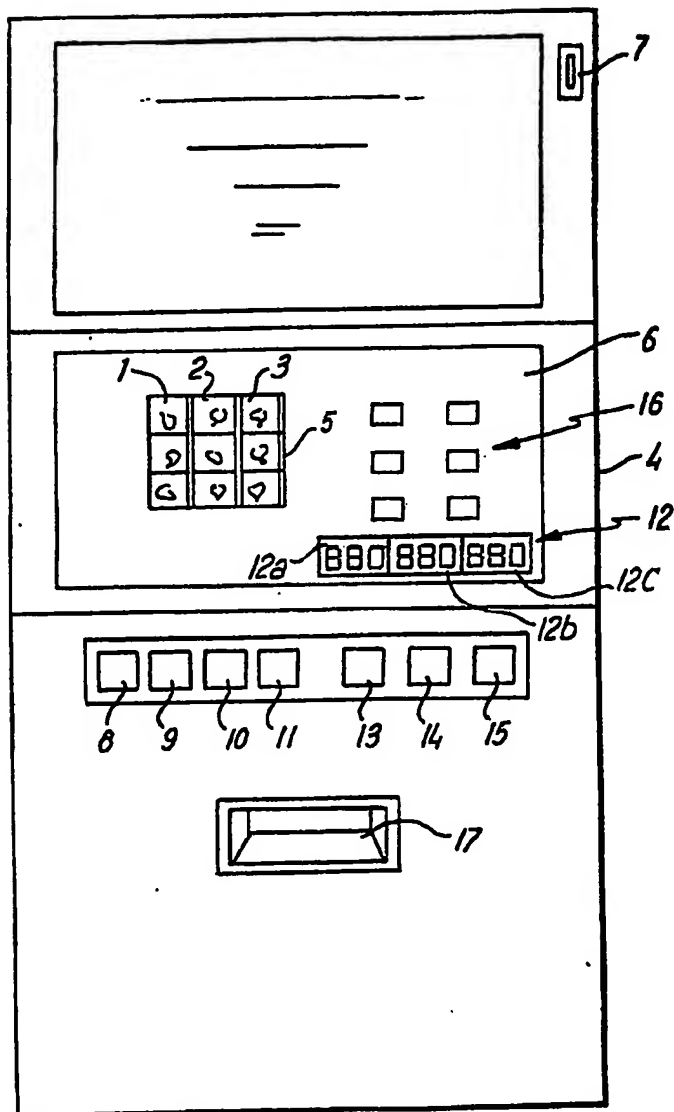


**At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy. The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.**

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- 1 -

ENTERTAINMENT MACHINES

This invention relates to a coin- (or token-) operated entertainment machine of the kind which is operable to play games resulting in the selection and display of combinations of symbols and with which a win indication is given in the event that a symbol combination of a predetermined winning nature is obtained. The invention is more particularly, although not exclusively, concerned with such a machine which is a fruit machine and with which the displayed symbols (typically representations of fruit) are selected at random, for example, by rotation of reels or by change of a video display simulating the rotation of reels.

It is known to provide a fruit machine with a 'gamble' feature whereby, after attaining a win indication but before receiving an award (such as a cash pay out) corresponding to the win, the player has the option of actuating a gamble device which can modify the award by increasing or reducing (or cancelling) it. This feature advantageously contributes to the entertainment value of the machine.

However, a limitation may be imposed on such entertainment value in so far as the player only has the option of gambling the award attained at the end of a winning game.

An object of the present invention is to provide a gamble feature of more extensive entertainment value.

According to the invention therefore there is provided a coin- (or token-) operated entertainment machine which is operable to play games resulting in the selection and display of combinations of symbols and with which a win indication is given, and a corresponding award

- is made available, in the event that a symbol combination of a predetermined winning nature is obtained, characterised by the provision of an award accumulator operable to display to the player an accumulated total of awards obtained in successive games, and also by the provision
5. of a gamble device operable to gamble at least a part of said accumulated total with the possibility of increasing or decreasing the value thereof.

- With this arrangement, entertainment can be promoted since it is not simply the value of the award at the end of a winning game which can be gambled; the player can have the option of gambling some or
10. all of a larger accumulated award.

The award may constitute a monetary value (or number of tokens) to be paid out (or to be credited) to the player.

- Alternatively or additionally the attained award may relate to a special feature or features made available to the player. For example,
15. the machine may have a device operable at the end of a game to adjust one or more of the visual displays with the aim of improving the final combination (such as a 'nudge' device of the kind commonly used in fruit machines) and the attained reward may relate to the number or extent of available adjustments (such as the number of
  20. nudge steps).

- With regard to the award accumulator this may comprise a digital display whereby at the end of a winning game the display is appropriately incremented. The accumulated total may be held for a predetermined maximum number of games and/or until the player opts
25. to receive the accumulated value rather than holding this. The gamble device may be rendered operable on a predictable regular basis or on

a random basis or on attainment of a predetermined criterion (e.g. when the accumulated total exceeds a predetermined value).

Part or all of the accumulated total may be made available for the gamble. Where part can be selected, the selection may be made on 5. any suitable basis, i.e. at the option of the player, in a predetermined manner, at random or otherwise. An auxiliary indicator may be provided for indicating the selected part to be gambled.

With regard to the gamble device, this may be arranged to be initiated, when made available for operation, by means of a press-button 10. or the like. The machine may incorporate a gamble indicator comprising an arrangement of indications representative respectively of different awards and also a lost or nil award, the appropriate indication being illuminated after operation of the gambling device to indicate the new award obtained.

15. Where the accumulated total represents monetary (or token) value provision may be made for transferring to and/or from this, monetary (or token) value available for actuating the machine for playing games. Thus, the accumulated total may be incremented on insertion of coins (or tokens) into the machine and/or may be decremented when games 20. are played. This incrementing and/or decrementing of the total may occur automatically or at the option of the player.

Most preferably, the machine of the invention is a fruit machine and the displayed symbols (which may be representations of fruit) are selected at random as by the rotation of reels (usually three or four 25. reels) having such symbols marked around the periphery thereof, or by the operation of a VDU display simulating such rotation of reels or

by the random illumination of symbols on areas of a display panel or otherwise.

The invention will now be described further by way of example only and with reference to the accompanying drawing which is a  
5. diagrammatic front view of one form of an entertainment machine according to the invention.

The machine is a fruit machine having three reels 1, 2, 3 which are rotatable within a housing 4 behind a window 5 in a front panel 6.

10. Each reel 1, 2, 3 has pictures of fruit (designated A, B, C) at 20 positions around its periphery, and rotation of each reel is effected and also arrested by a microprocessor-controlled stepping motor, the arrangement being such that the reel always comes to rest in precise registration with the window. Each stopping position is identified by  
15. the microprocessor control circuitry in known manner.

In use, the machine is actuated by a player by insertion of one or more coins or tokens into a coin mechanism 7 and a starter button 8 is pressed to cause the three reels 1, 2, 3 to rotate for different random periods of time before coming to rest. When the reels 1, 2, 3  
20. come to rest, their stopping positions are identified and a win indication is produced in the event that the identified stopping positions correspond to the display of a predetermined winning combination of fruit (say three fruit of the same kind) at predetermined positions in the window 5 (e.g. on a horizontal win line passing through the  
25. middle of three displayed fruit for each reel).

There is a respective player-operable button 9, 10, 11 for each

- reel beneath the window 5, for 'hold' and 'nudge' features. At the start of some games, as selected on a random basis, the buttons 9-11 are made available for hold operation and when so operated by the player the or each pertaining reel 1, 2, 3 is held against rotation
5. during the course of the ensuing game. At the end of some games, as selected on a random basis, the buttons 9-11 are made available for nudge operation and when so operated by the player the or each pertaining reel 1-3 is indexed through a number of steps (i.e. stopping positions) as determined by the action taken by the player and within
10. the limits of a total permitted number of nudge steps. Alternatively a player-initiated automatic nudge facility (which automatically nudges the reels through the optimum number of steps within the imposed limits) may be provided as described in Patents Nos. 2092797 and 2144568.
15. Moreover, the machine has an LCD or LED digital display 12 and three player-operable buttons 13, 14, 15 respectively for win collection, gamble selection and gamble purposes (yet to be described). A gamble display 16 is also provided on the front of the machine and this has indications which can be back illuminated corresponding to the possible
20. results of a gamble (e.g. lose, x2 etc).

The digital display has three sections - a monetary credit section 12a, an individual win section 12b, and an accumulated win section 12c.

- When coins are inserted into the machine the credit section 12a
25. is appropriately incremented, and correspondingly this section is appropriately decremented as credit is used up by playing games.

If the outcome of a game is a win having a corresponding monetary award the individual win section 12b is incremented to show the value of the award.

- The player now has the option of pressing the win collect button 5. 13 or the gamble button 15. If the button 13 is pressed the contents of the section 12b are transferred to 12c, that is the individual win section 12b is decremented to zero and the accumulated win section 12c is incremented by the same amount. If the button 15 is pressed the award value in the win section 12b can be gambled, in conventional 10. manner, by the player. That is, two indications on the gamble display 16 flash alternately (e.g. twice the present award value, and 'lose') and the player can press the gamble button 15 in the hope of stopping the flashing sequence on an increased award indication. Repeated opportunities for gambling may be permitted possibly up to a 15. predetermined maximum win (or until the player has lost). The contents of the win section 12b (if any) following termination of a gamble are transferred to the accumulated win section 12a by the player pressing the button 13 as an alternative to pressing the button 15, or automatically if the predetermined maximum is reached.
20. The player can then play further games and if any of these also result in wins, the individual win section 12b is again appropriately incremented and the player has the option of pressing button 13 to transfer further win value from the individual win section 12b to the accumulated win section 12c to cause the latter to display an accumulated 25. total win value.

When the accumulated total in the win section 12c is greater than



a predetermined value the player has the option of 'super' gambling an amount equal to or exceeding the said predetermined value at any suitable opportunity at the start or end of a game. That is, the player can press the gamble selection button 14 to cause accumulated

5. value to be transferred from the win section 12c to the win section 12b. As the button 14 is first pressed the said predetermined value is transferred by appropriate decrementing of the section 12c and incrementing of the section 12b. As the button 14 is further pressed, further value can be transferred from the section 12c to the section

10. 12b up to the value of any maximum for which the machine is pre-set. The gamble display 16 flashes, and the button 15 is pressed by the player to gamble the contents of the section 12b in the manner described above.

If the player loses when super gambling he has the option of

15. transferring further value from section 12c to section 12b with button 14 (if there is sufficient value in section 12c) and then again super gambling this. If the player wins, the contents of the section 12b are automatically transferred to section 12a.

At any time at the end of a game the player can press the

20. collect button 13 to transfer the contents (if any) of section 12b to section 12c and then, on subsequent pressing of the button 13, to transfer the contents of the section 12c to section 12a. As desired, the arrangement may be such that the contents of 12a can only be used as game-playing credits. Alternatively the arrangement may be

25. such that on further pressing the collect button 13, the credit section 12a is decremented to zero as the corresponding monetary amount is

paid out to the player by discharge of coins (or tokens) through an outlet 17.

The various buttons 8-11, 13-15, indicators 16 and digital display section 12 are connected to, so as to feed signals to and to be 5. controlled by, the microprocessor-based control circuitry of the machine.

With the arrangement described the player has the opportunity not only of gambling individual attained win awards but also of gambling larger amounts corresponding to accumulated win awards.

It is of course to be understood that the invention is not intended 10. to be restricted to the details of the above embodiment which are described by way of example only. Thus, for example, the player may only have the opportunity of gambling all or a predetermined part of the accumulated value rather than being able to select a portion to be gambled. Also, it is not necessary for there to be 15. three separate digital display sections 12a, 12b, 12c. One or both of the sections 12a, 12b may be omitted if desired. Thus, it is possible to have a single credit/accumulated win section which is incremented both by coins inserted into the machine and by accumulated win awards whereby the entire value is available for funding game playing and 20. also the entire value including the value of inserted coins can be used in whole or a selected part for gambling when the 'super' gambling feature is made available.

Claims

1. A coin (or token) operated entertainment machine which is operable to play games resulting in the selection and display of combinations of symbols and with which a win indication is given, and a corresponding award is made available, in the event that a symbol combination of a predetermined winning nature is obtained, characterised by the provision of an award accumulator operable to display to the player an accumulated total of awards obtained in successive games, and also by the provision of a gamble device operable to gamble at least a part of said accumulated total with the possibility of increasing or decreasing the value thereof.
2. A machine according to Claim 1 characterised in that said accumulated total constitutes a monetary value (or number of tokens) to be paid out (or to be credited) to the player.
3. A machine according to Claims 1 or 2 characterised in that said accumulated total relates to the availability of a special feature to the player.
4. A machine according to any one of Claims 1 to 3 characterised in that said award accumulator comprises a digital display which is arranged to be incremented at the end of a winning game.
5. A machine according to any one of Claims 1 to 4 characterised in that the accumulated total is held for a

predetermined maximum number of games.

6. A machine according to any one of Claims 1 to 5 characterised in that said gamble device is arranged to be initiated, when made available for operation, by means of  
5 a press button.

7. A machine according to any one of Claims 1 to 6 characterised in that a gamble indicator is provided, said indicator having a set of indications representative of awards and a lost or nil award and the appropriate  
10 indication being illuminated after operation of the gamble device.

8. A machine according to Claim 2 or any Claim dependant on Claim 2 characterised in that provision is made for transferring monetary (or token) value from said  
15 accumulator total to be available to actuate the machine for playing the game.

9. A machine according to Claim 8 characterised in that the accumulated total is incremented on insertion of coins (or tokens) into the machine and decremented when games  
20 are played.

10. A machine substantially as hereinbefore described with reference to and as illustrated in the accompanying drawing.